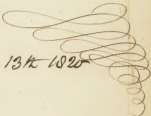
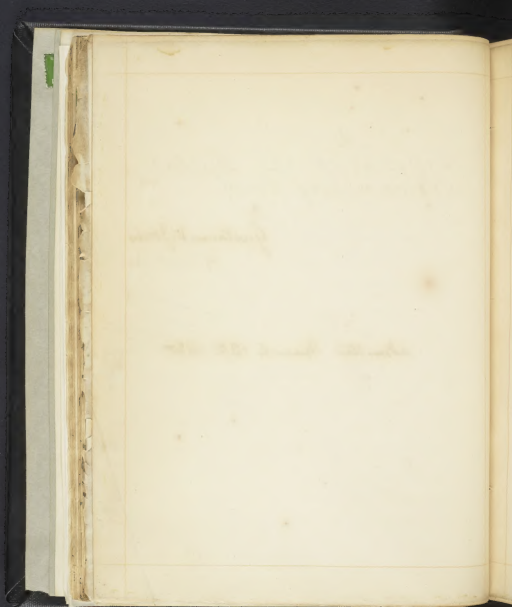


At
Dissertation on Bilious
Inflammatory Fever.

By
No 276 Market St. - Gustavus V. Jones
Mrs Mason of Virginia
Nov^r. 15th.

admitted March 13th 1820





A Dissertation de —



Bilious Inflammatory Fever.

Bilious inflammatory fever is one of the most common diseases of the United States. It is to be met with throughout their whole extent, and at all seasons of the year, but prevails most generally to the south, and there during the warmer seasons.

The causes which produce it are various, whatever tends to enervate the body, as great fatigue, violent exertions, intemperance in eating, or drinking; certain passions of the mind, as grief, fear, anxiety &c. Cold applied to the body previously debilitated, checking perspiration, tends to produce a febrile disposition and thereby acts as an exciting cause. But of all the causes of this disease, there is not one of more general influence, or which is more universally admitted, than marsh miasmata; Lancisi, an Italian, was the first who reported



it to this cause, and succeeding ages have confirmed the justice of his observations. The exact nature of these exhalations is not properly understood, but they are generally admitted to arise from putrid vegetable matter, acted on by heat and moisture. They are sometimes carried to the distance of several miles in a state, capable of producing disease, and are observed to be more powerful, concentrated, and virulent in hot climates, and in warm seasons, than in the more temperate climates. It further appears, that the nature of the diseases themselves are governed by the degree of virulence of these miasmata, so much so, that Cullen gave it as his opinion, that Intermittent, Remittent, and Continued fevers were produced by the same causes, acting with different degrees of force. These, then, are the principal causes, which, applied to the body, produce the disease



under consideration, the symptoms of which are described as follows

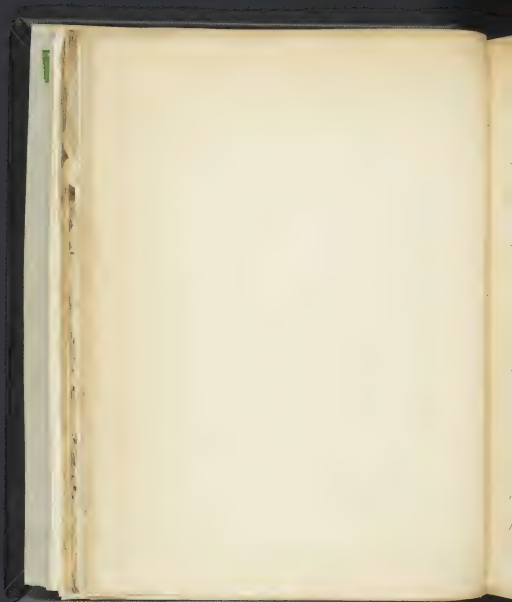
The patient is seized with a considerable degree of languor or sense of debility, together with sluggishness in motion, and frequent yawning and stretching; the face and extremities at the same time become pale, and the skin over the whole surface of the body appears constricted; the patient then perceives a sensation of cold in the back, passing from thence over his whole frame; and this sense of cold continuing to increase, tremors in the limbs and rigors of the body succeed. Along with these symptoms, are a loss of appetite, want of natural taste in the mouth, slight pains in the head, back and loins, and a small and frequent respiration. The sense of cold and its effects after a little time decrease, and are alternated with flushings, and at last, going off altogether,



the we succeed in just that & that ge-
nerally over the whole under the pressure of the
we the disease is more violent the more the
is just at first, with a violent pain in the
head, & profuse at the end, which at the
stomach, and an inclination to vomit.

There are likewise great thirst and ex-
haustion, and the pulse is fast and frequent
beating, perhaps 120, 140, or 160 beats in a
minute. When the symptoms of the disease
are very high, and there is a considerable
determination of blood to the head, delirium
will arise. In this fever a well marked
stage of the continued kind. There is generally
an increase of the temperature towards
evening.

If the disease is that of pure latent malar-
ia, its long continuance, or the result of it
in general, there are a variety of the tender,
tactile, at the last rather, immovable, & dis-



charges by wine and stout & old brandy of the 1st quality, and hinders will be observed: where no such appearances take place, the disease will go through its course, and at length cease.

The symptoms pointing out the approach of a crisis, are, the pulse becoming soft, moderate, and even, the patient quiet; the tongue losing its fur and becoming clean, with an abatement of thirst; the skin being covered with a gentle warmth and giving soft to the touch. the secretory organs bestowing their own of bile and the urine becoming, like crystals of acetate red colour, and becoming turbid as being returned to stand every time.

These are the symptoms usually attending the disease, and from a review of them, we should be led to pronounce it a disease of high action, and this is unquestionably the case which is usually observed in our climate. The plan of treatment indicated is Stimulus. We



most subtle inordinate action, and bring
it to the salutary standard; and of all the
remedies we possess, I must this indication
evacuation is found to be the most prompt,
and efficacious. This evacuation being deter-
mined on, the blood should be drawn from a large
vein, as it is universally admitted that the
effect of the evacuation was proportion
to the nature with which it is made.

Bloodletting, as it is the most manageable pro-
cedure, so it possesses the most absolute influence
over animal movements either as directly ef-
fective of a final purpose, or as preparatory
to the action of other means necessary to en-
sure the final purpose. As it respects the
regulation of the operation we should be gov-
erned entirely by the symptoms present; as
long as the pulse is strong and frequent, the
breathing difficult, with heat and redness of
venescence is certainly the need, &c. &c.



Dissections, too often, show the fatal consequence of neglecting it.

Having subdued the most urgent inflammatory symptoms, usually present in the commencement of this disease, by the measures recommended, our attention is next turned to the state of the stimulating cause. The intimate sympathy subsisting between it—particularly the stomach—and the rest of the system, is such as to render it an object of primary importance in the treatment of disease. The stomach is generally affected with a foul, offensive matter, for the evacuation of which nature becomes impeded.

By the operation of emetics not only are the contents of the stomach evacuated, but the bowels are moved, such frequent attendance on this disease, are relaxed; the heat of the skin is lowered, and ~~and~~ a mild diaphoretic spreads over the surface, even a solution



of the disease is sometimes obtained. But it is
often necessary to have frequent recourse to this
remedy in order to bring about a permanent cure;
and it is occasionally necessary to repeat the remedy
several times in the day. The small most highly
recommended by Dr. Chapman is a combination
of Theriac and tartarized Antimony: the former
gives promptness of operation to the emetic, and the
latter by making a permanent impression on the
system breaks the continuation of morbid affections
in which the disease is kept up. The distressing
tossing and cough which are such frequent and
unhappy attendants on this complaint are often
so readily removed by the remedy under consid-
eration as to have given rise to the opinion
that there are indeed no sympathies con-
nexion between the stomach and lungs.

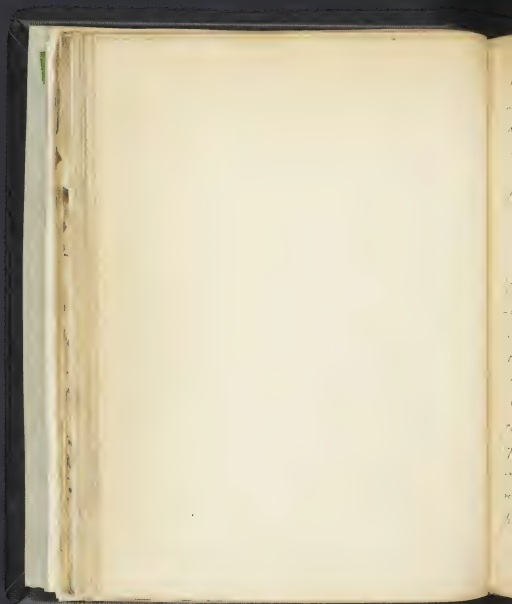
Emetics are a necessary part of the most
important means made use of to cure the pro-
prietor of bilious cases: so to cure the patient



of the stomach as it empties the bilious contents
into the small intestine, and excite the contents of the
duodenum, and perhaps also excite the contents of
the intestine, and excite the whole of the abdo-
minal viscera, excite the circulation in them, and
promote their several secretions, and lastly excite
the action of the liver, & excite the
secretion of bile. All these several effects are in man
excited by the same combination, pursued with
advantage.

By a natural transition I pass ^{from} the class of
emetics to cathartics. These medicines increase
the circulation from the intestines and whether we
consider them as means connecting the contents of
the intestines as a machine receiving the drainage
from their exhausted vessels they appear to be a
class of emetics of the most indisputable.

In the treatment of bilious fever we are pre-
vented from giving bloodletting to the extent that
the symptoms seem to indicate, through fear of



reducing the system too much, and the variations from the equilibrium level would be an accident necessary for the discharge of the immense quantities of blood which are in the system. This is the risk of making the system too small. The danger is not the same, but the danger is the same, and the danger is the same.

If we consider the system as being a part of the whole, in the event of the infection, and the immediate action may be taken from the immense circulation that is in the system, it can be obvious that a very great circulation can be made by the system, and it is the same for a stimulus applied to the system, the point being at the same time communicated to the rest of the body, it may be possible, both the ends of the intestine and the rest of the system, furnish the secretion, poured into it, and a considerable relaxation in the whole system, and there fore hanging seems to be a remedy, particularly well



sailed to this stage of the disease. The best
cathartic here to be used is mercury; 10 or 15 grains
of calomel, succeeded by a dose of salub. or rhubarb,
have been found to evacuate the bile more effe-
ctually, & to produce a more speedy relief of
the disease than any other purge. Indeed it
might well be said in reference to calomel, that
the action of cathartics is not confined to the bowels
to which they are directly applied: Their stimulus
is extended to the neighbouring organs, and hence
they promote the secretion, and increase the dis-
charge of the bile and other pituitous humors, pour-
ed into the intestinal canal. Dr. Cullen's re-
marks that in the administration of mercury
in fever, we should watch for the remission, as
otherwise they are apt to be inactive upon the
Stomach; give a purge, continue it, during the
paroxysm and it will either be immediately re-
jected, or will be inactive in the stomach for
many hours.



The irritability of the stomach is sometimes so great that it is not possible to give any food, and it is then necessary to give nourishment by means of enemata, or rectal injections, and the irritability is removed. The same means are sometimes rendered necessary when the distention of the abdomen which often attends typhoid fever, and which is due to the most destructive purgatives; and it is not every day that the necessary discharges are easily obtained by the means here recommended. When most of the purgatives commonly used have failed of success a solution of tartarized potassium, or some of the solutions has proved of great and frequent value.

After the alimentary canal has been freed from its noxious contents by the above means, enemas become necessary. It is a maxim generally observed in the treatment of this

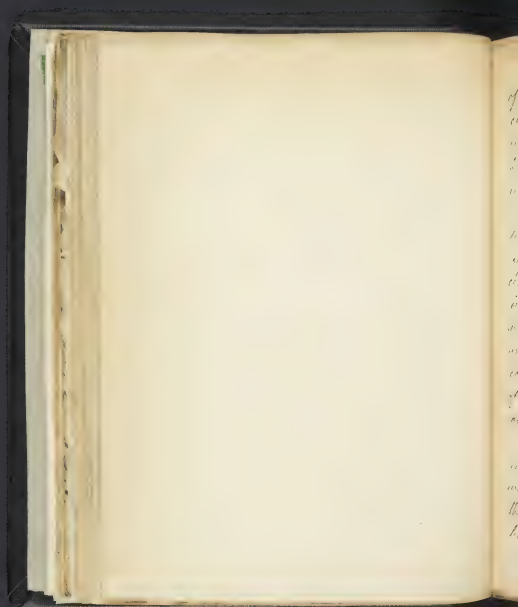


disease, that as long as the febrile symptoms continue there is a disposition to accumulation of matter in the intestines, which, if permitted to remain, serves but to act as a cause of irritation to the system.

At this stage of the disease, when the most inflammatory symptoms have been subdued by the power of treatment above detailed, Lymphatics become of the utmost importance several circumstances contributed to lead Physicians to their free use in fevers. The skin was earthy dry and hot; and it was often observed that a shuddering or remittent crisis was marked by diaphoresis is even by a copious sweat. Hence it was concluded that by following the latter nature bled over, and inducing this relaxed state of the vessels of the skin the disease would be removed. But in their administration great care has to be observed. As long as the skin is dry and hot Lymphatics which are of the stimulating kind



are to be avoided; as, if they fire, producing
heat. They will most especially aggravate the
symptoms they were intended to relieve. Those
diaphoretics which reduce animal action and
stop the extreme vessel are here to be used;
and the medicines best calculated for this purpose
are the antimonial preparations; and
of these the one in most general use is
the tartar emetic: administered in the dose of
from $\frac{1}{2}$ to $\frac{1}{4}$ of a grain it produces disease
so, rapidly, even as to have given rise to
the opinion, that it, alone, possesses decidedly
antiphlogistic, independent of its action as a di-
aphoretic. In its administration care should be
taken never to carry it to the extent of caus-
ing the stomach; it being a law of the ani-
mal economy that if nausea exist to any
extent it will be followed by reaction, which
necessarily increases the pain. But cases will
sometimes occur where, from the irritability



of the stomach, the not insensible external de-
 ct. There we must resort to one of two kind of
 stimuli, one of these is the external motion of the
 vessel. This not only too great power in inducing
 arterial action but induces contraction.

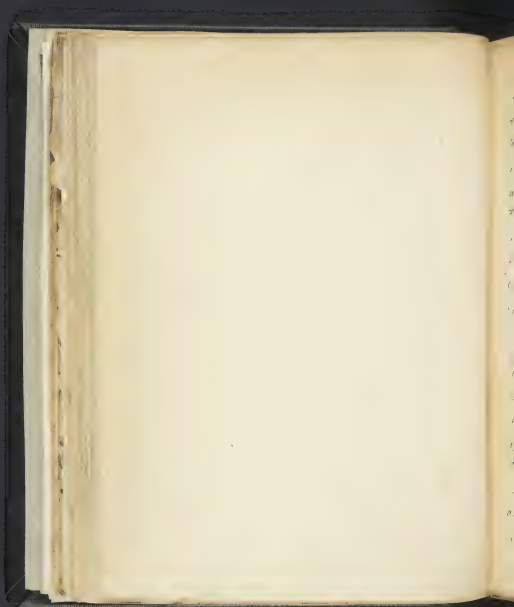
A sympathetic connection appears to exist be-
 tween the stomach and surface of the body, in con-
 sequence of which the state of the one is to a
 certain extent communicated to the other. This
 is exemplified in some case of indigestion of the stomach,
 which after refusing to yield to the remedies
 usually employed as soon as the skin becomes
 constricted, is at once relieved by the application
 of a stuporific on the surface, whether stannous
 ointment or procured by art.

Another remedy of considerable importance
 in the treatment of this disease is cold whether
 we employ it in the form of cold air let into
 the room or of cold water applied to the
 body. But this is to be used under certain restrictions.



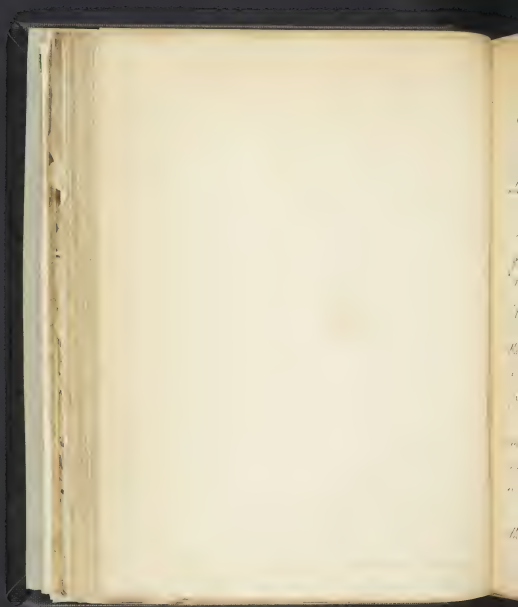
Cold, or an antiphlogistic remedy should never be applied in such a degree as to produce a disordered circulation. That is, it will certainly irritate and prove injurious. When so employed as gradually to evacuate caloric from the system it does good.

In the treatment of febrile diseases the air of the chambers should be always held at a moderate temperature so as to be perfectly grateful to the feelings of the patient, not so as to produce chills. When the febrile heat is high and burning and the skin dry, the continued application of cold water to the hands wrists and temples, and sometimes to the feet and ankles proves exceedingly pleasant, and is at the same time highly efficacious in moderating the excess of arterial action. The water may be applied either by wet cloths frequently renewed, or by repeated affusions. In this case caution



and great caution is requisite but some
degree of chilling must prove the objection.
Used in the way above recommended it reduces
the activity of the bloodvessels cause diarrhoea,
and quiets the irritability and restlessness of
the patient. But it is to be remembered that this
remedy is never to be used when the pulse is
small or symptoms of active pyrexia, or the
cold applications will tend to increase the
exhaustion.

In the further formation of the treatment
of this disease we can only afford to hint. This
time; and here I cannot say, as yet, that the
should ever be used as the treatment ever
time have been fully premised. As if the be
applied during an early period when the mor-
bid action is highly inflammatory, the can-
not find to do much, for the simple cold the
amount of their own stimulation is that water
which the system is already labouring and be

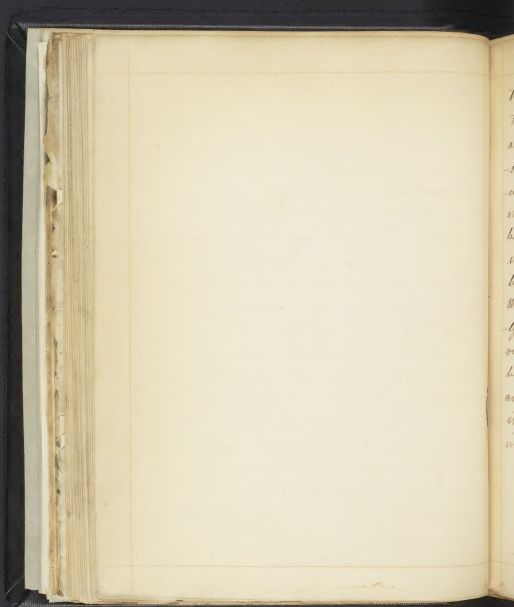


that means, augment the force of febrile action. In cases of inflammatory fever the lancet should have nearly completed its duty before blisters are called into requisition.

The cases in which blisters are particularly indicated are, when after the general system has been pretty well reduced there remain morbid affections of particular parts: by the application of blisters to these relief is obtained and thus they eradicate the last remains of disease, which might otherwise prove a source of much pain and distress.

Having gone through the general treatment of the disease it may be sought here to make a few observations on the proper course which should be observed by the patient.

During the early stage of the disease, when the symptoms are inflammatory it is obvious



That every thing which tends to stimulate the system should be carefully avoided, and all such means made use of as tend to reduce action and calm irritation. As con-
-ducing to this end the antiphlogistic regimen should be strictly observed; the patient should be kept cool and perfectly at rest, the room should be kept quiet and no person should be admitted except the necessary attendants, When the disease has been subdued, and there is only debility remaining, the patient should return very gradually to his former habits; his diet should be simple, light and of a digestible nature, and his exercise should be in proportion to his strength, gradually increasing it as his strength improves until it be perfectly restored.

